

## **REMARKS**

### **Defective Declaration under 37 CFR 1.114**

Applicant thanks Examiner Patel for the telephone call in which Examiner Patel expressed his concern about the copy of the 131 declaration submitted on November 10, 2009 because the 131 declaration identifies Application No. 12/191,563, not the serial number of the present application. Applicant explained that the copy of the 131 declaration was submitted in the present application to merely point out the fact that the 131 declaration had been submitted in Application No. 12/191,563 to overcome the reference, Karczewicz, which was also cited in the present application. Examiner Patel nonetheless expressed his concern that the copy of the 131 declaration might cause confusion in the future. Taking the Examiner's suggestion, Applicant herewith submits a 131 declaration executed specifically for the present application.

### **Rejection under 35 U.S.C. § 102**

Claims 28-33 were rejected under 35 USC 102(e) as being anticipated by Karczewicz et al. (US 2004/0066974).

Karczewicz qualifies as prior art against the present invention under 35 U.S.C. §102(e). Karczewicz was filed in the Office on October 3, 2002. On the other hand, the present application was filed on August 14, 2008 as a continuation application of United States Patent Application No. 10/680,205 filed on October 8, 2003, which claims priority to Japanese Patent Application No. JP 2002-295,429 filed in Japan on October 8, 2002<sup>1</sup>.

Applicants also submit a 131 declaration by the inventors of the present application and associated Exhibits to prove prior invention. The declaration, along with Exhibit A, establishes the fact that prior to the effective date of Karczewicz, October 3, 2002, the inventors of the present applications prepared simulation programs and run the programs to test the performance of the present invention. As indicated in Exhibit A, the simulations implemented “CALVC for ABT” on three methodologies, “Split,” “Real” and “Interleave.” Practically, CALVC can be implemented only on 4x4 or 16 transform coefficients. However, under ABT, transform coefficients may take different block sizes,

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<sup>1</sup> Applicants believe that the certified translation of JP 2002-295,429 submitted on November 10, 2009 has perfected the claimed priority to the Japanese application filed on October 8, 2002.

sometimes larger than 4x4. Therefore, in order to implement CALVC on a block of transform coefficient larger than 4x4, the block of transform coefficients has to be divided into multiple strings of transform coefficients each having 16 transform coefficients the block of transform. “Split,” “Real” and “Interleave” provide three different methodologies to divide a block of transform coefficients larger than 4x4. As also indicated in Exhibit A, “Interleave” denotes the present invention.

Please note that the invention “Interleave” discussed in Exhibit A was not just an idea but was completed with sufficient details. Exhibits C and D provide evidence that the present invention “Interleave” was sufficiently operational on a computer as of the date of Exhibit A. In fact, Exhibits C and D show some of the important claim limitations recited in the pending claims. More specifically, Exhibit A explains the claim limitations regarding:

- (1) entropy-decoding the coded picture data to derive the strings of entropy-decoded transform coefficients;
- (2) combining the shorter strings of entropy-decoded transform coefficients back into the single string of entropy-decoded transform coefficients; and
- (3) performing an inverse orthogonal transform on the single string of entropy-decoded transform coefficients in order to reproduce the matrix of image signal;
- (4) wherein the coded picture data comprises entropy-coded data representing strings of sixteen (16) transform coefficients obtained by interleaving, from a lower frequency coefficient, sixty four (64) transform coefficients of an orthogonally transformed 8x8 block to produce four (4) strings of sixteen (16) transform coefficients,
- (5) wherein entropy-decoding the coded picture data comprises entropy-decoding the entropy-coded data of the respective strings of sixteen (16) transform coefficients,
- (6) wherein combining the shorter strings of entropy-decoded transform coefficients comprises de-interleaving, from a lower frequency coefficient, sixty four (64) transform coefficients from the four (4) strings of sixteen (16) transform coefficients to reconstruct the single string consisting of the sixty four (64) transform coefficients of the orthogonally transformed 8x8 block, and

(7) wherein performing an inverse orthogonal transform comprises performing an inverse orthogonal transform on the sixty four (64) transform coefficients of the orthogonally transformed 8x8 block.

Using the simulation programs including the programs shown in Exhibits C and D, the inventors compared the performance of the present invention “Interleave” with those of other methodologies “Split” and “Real” to confirm that the present invention worked best among the three methodologies (See Exhibit B). Applicants therefore believe that the declarations and Exhibits A-D establish the fact that the present invention was already reduced to practice as of the date of Exhibit A prior to October 3, 2002. Thus, Karczewicz does not qualify as prior art against the present invention.

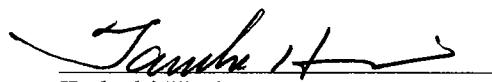
In case the Examiner disagrees with reduction to practice prior to October 3, 2002, Applicants alternatively assert conception of the present invention by the inventors prior to October 3, 2002, as evidenced by Exhibits A-D, and their continuing diligence through the date of constructive reduction to practice, which is October 8, 2002, as evidenced by Exhibits E-H. The declaration and Exhibit E establish that the inventors of the present application began on drafting the Japanese patent application for the present invention prior to October 3, 2002. As stated in the declaration, Mr. Adachi dedicated a significant amount of time to drafting the Japanese application and continued it every day from the date of Exhibit E through October 8, 2002 (See *Ex Parte Marois et al.*, 166 USPQ 413 (Pat. Off. Bd. App. 1970), finding efforts to prepare a patent application sufficient to establish diligence). Mr. Adachi was required to prepare as comprehensive and perfect a draft application as he could because he knew that Japanese counsel would have little time to prepare a formal patent application from Mr. Adachi’s draft application.

Exhibit F was a proposal to JVT requesting an adoption of the present invention. The content of the proposal was a derivation from the draft application completed as of October 5, 2002. Applicants believe that Exhibit F shows how far Mr. Adachi had advanced or how close Mr. Adachi was as of October 5, 2002 towards completing drafting of the patent application. Three days later, on October 8, 2002, Mr. Adachi completed the draft application. As evidenced by Exhibits G and H, the draft application discussed all of the claimed inventions. On the same day, the Japanese counsel prepared

a formal application from Mr. Adachi's draft application and filed it in the Japanese Patent Office, which was later assigned Serial Number JP 2002-295,429.

Applicants believe that the declaration and the Exhibits establish the conception of the present invention prior to October 3, 2002 and the continuing diligence through October 8, 2002. Therefore, even if the Examiner disagrees with prior reduction to practice, Applicants believe that the declaration and the Exhibits still establish prior invention by the evidence of prior conception and continuing diligence. In any event, Karczewicz does not qualify as prior art against the present invention.

Respectfully submitted,



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